DENON

Hi-Fi FM Stereo Tuner

SERVICE MANUAL
MODEL TU-850
SOLID STATE FM STEREO TUNER

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NIPPON COLUMBIA CO., LTD.

SPECIFICATIONS

CIRCUIT SYSTEM: Super heterodyne

Tuning Range:	87.4 to 108 MHz	
Intermediate Frequency:	10.7 MHz	
Antenna Impedance:	300 ohm and 75 ohm	
Usable Sensitivity:	1.7 μV (9.8 dBf)	
Sensitivity at S/N 50 dB:	mono	3.3 μV (15.6 dBf)
	stereo	30 μV (34.7 dBf)
Effective Selectivity:	wide	35 dB (400 kHz)
	narrow	65 dB (300 kHz)
Image Rejection:	120 dB	
IF Rejection:	110 dB	
Spurious Rejection:	110 dB	
AM Suppression:	65 dB	
Capture Ratio:	wide	0.8 dB
	narrow	1.5 dB
Frequency Response:	20 Hz to 15 kHz	$^{+0.2}_{-1.5}$ dB
Signal to Noise Ratio:	mono	84 dB
	stereo	82 dB
Total Harmonic Distortion:	mono wide	0.05%
	narrow	0.1%
	stereo wide	0.06%
	narrow	0.3%
Stereo Separation:	wide	1 kHz 55 dB, 10 kHz 45 dB
	narrow	1 kHz 50 dB, 10 kHz 40 dB
Carrier Leak (19 kHz, 38 kHz):	80 dB	

OUTPUT VOLTAGE

Fixed Output:	1.3 V (100% modulation)
Output Impedance:	1.7 k ohm
Variable Output:	0 to 1.3V (100% modulation)
Output Impedance:	1.7 k ohm

LEVEL METERS

Indication Error:	±0.2 dB
Measuring Range:	+10, +20, +30 dB (0 dB: 0.775 V rms)
Frequency Response:	20 Hz to 15 kHz ±0.5 dB

POWER SOURCE: AC 120 V, 60 Hz (for U.S.A. and Canada)
or AC 240 V, 50 Hz (for U.K.)
or AC 220 V, 50 Hz (for Europe)

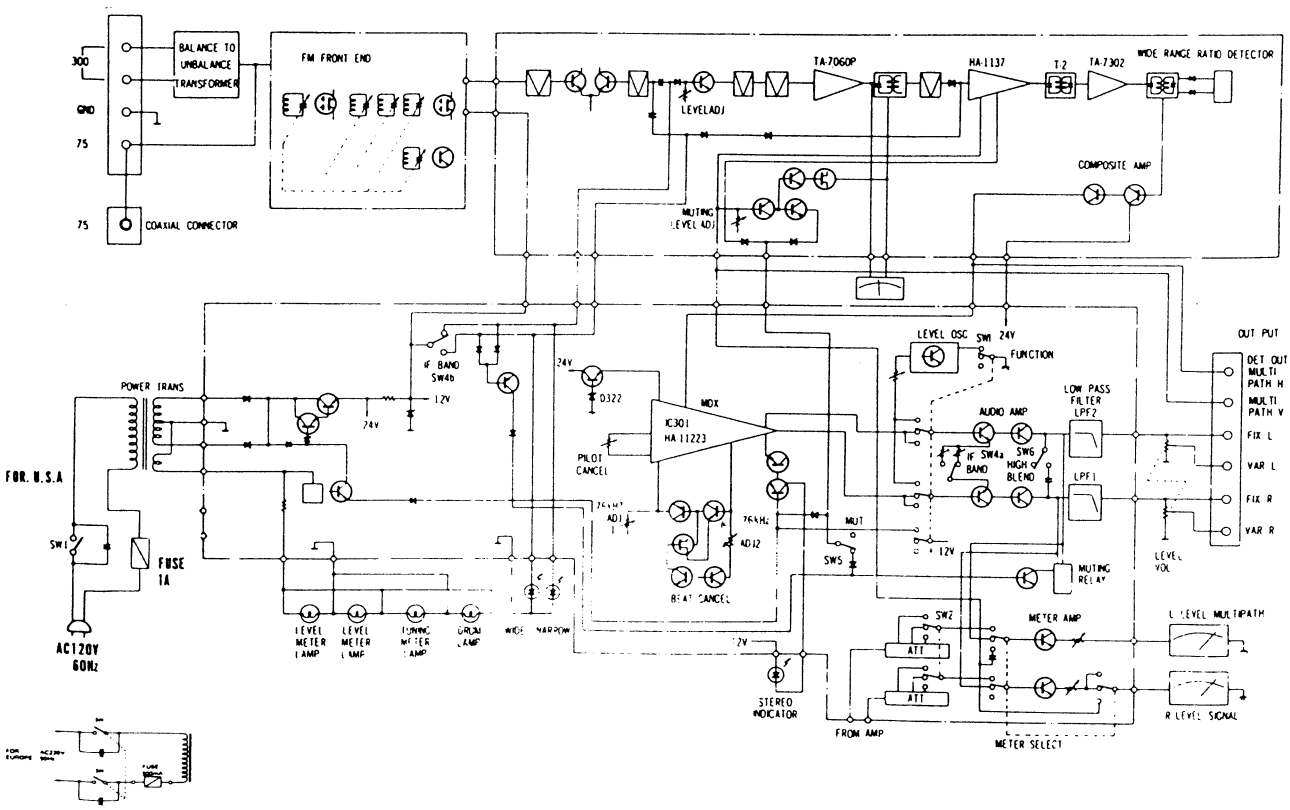
POWER CONSUMPTION: 15 W

DIMENSIONS: 434 mm (W) x 164 mm (H) x 400 mm (D)
17-5/64" (W) x 6-29/64" (H) x 15-3/4" (D)

WEIGHT: 11 kg, 24.3 lbs

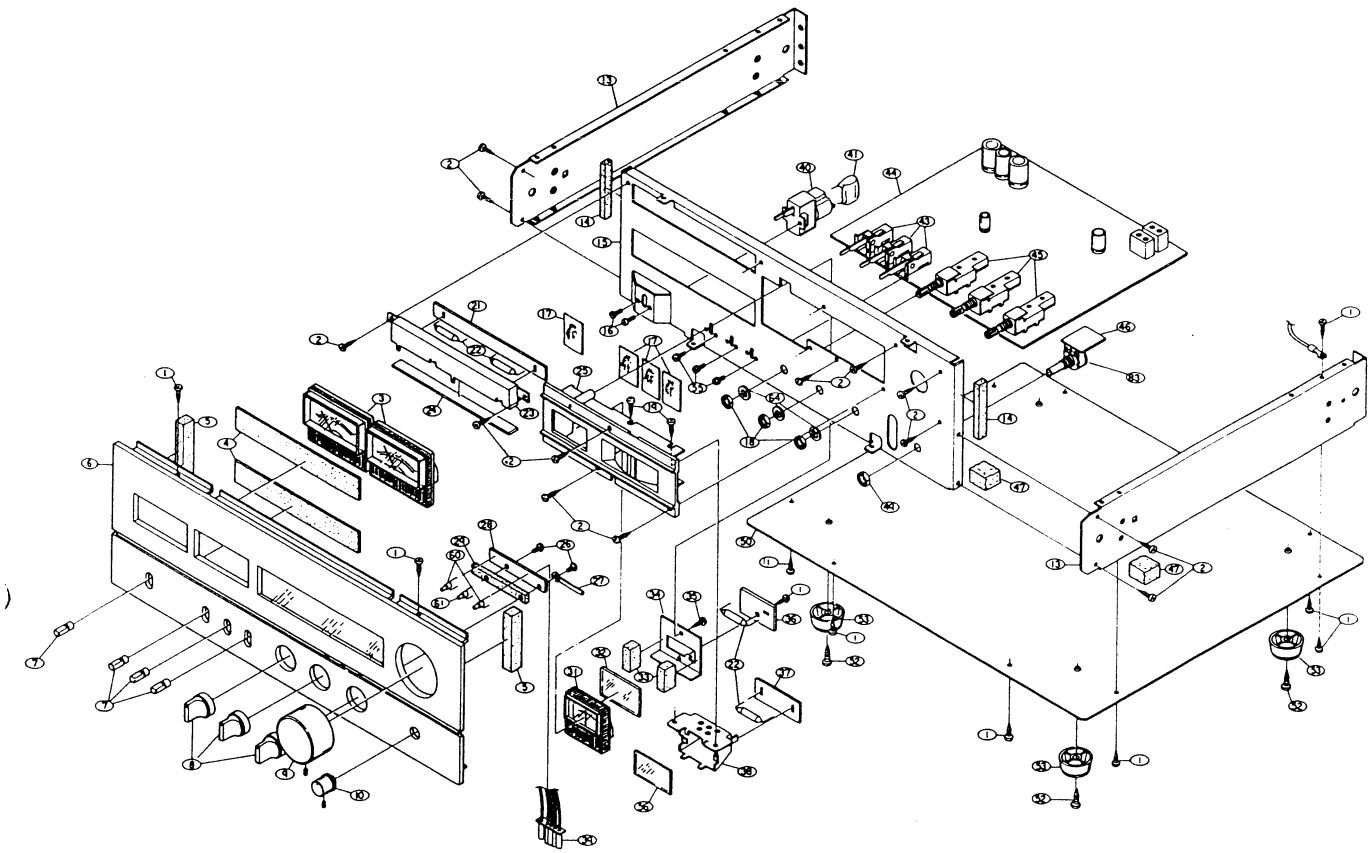
Design and specifications subject to change without notice.

BLOCK DIAGRAM

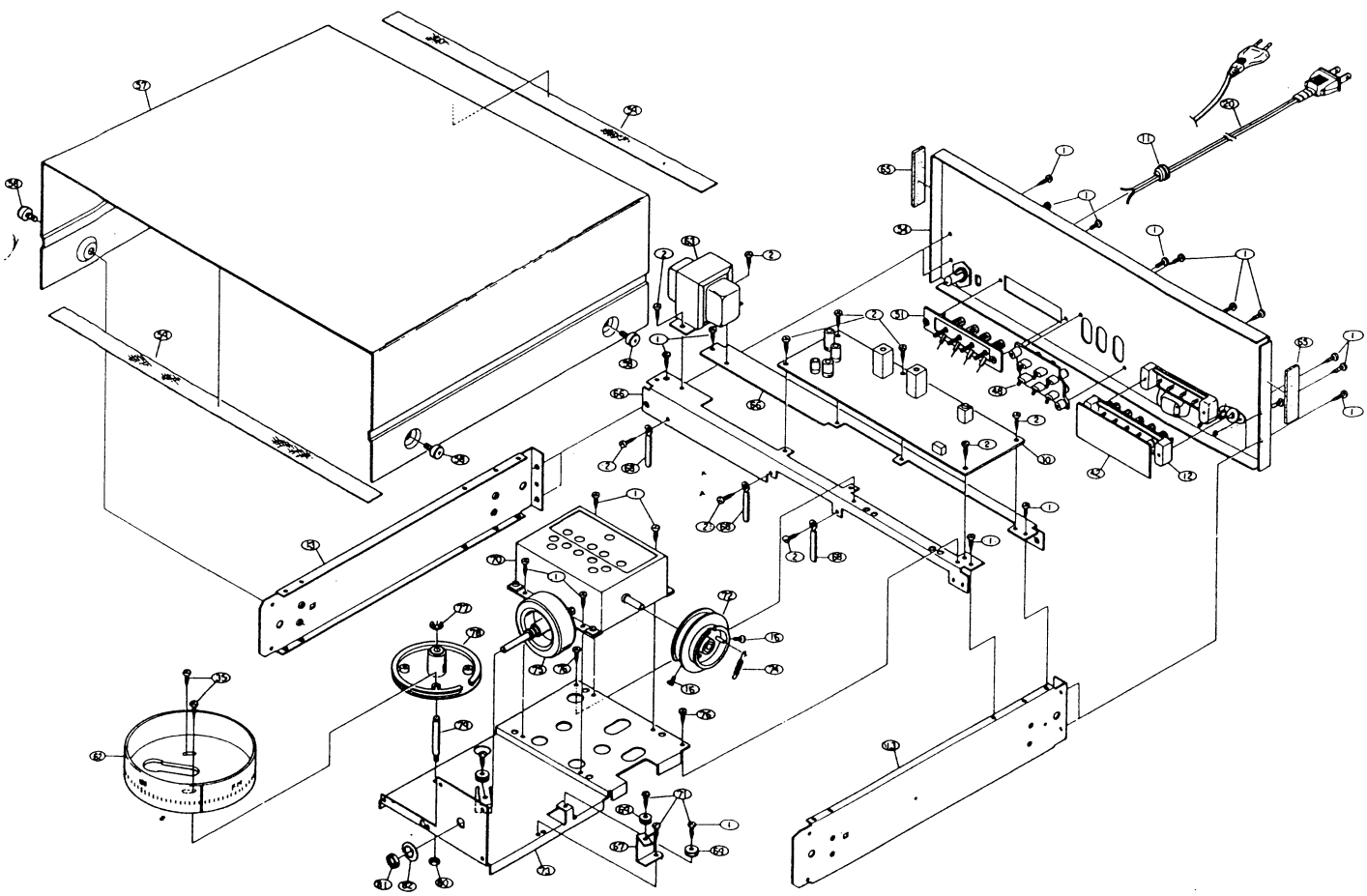


EXPLODED VIEW OF CHASSIS AND CABINET

FRONT SIDE



BACK SIDE

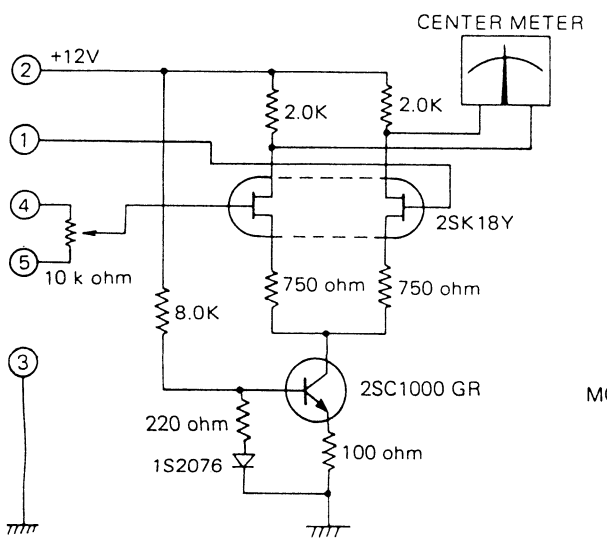


METHOD OF ADJUSTMENTS

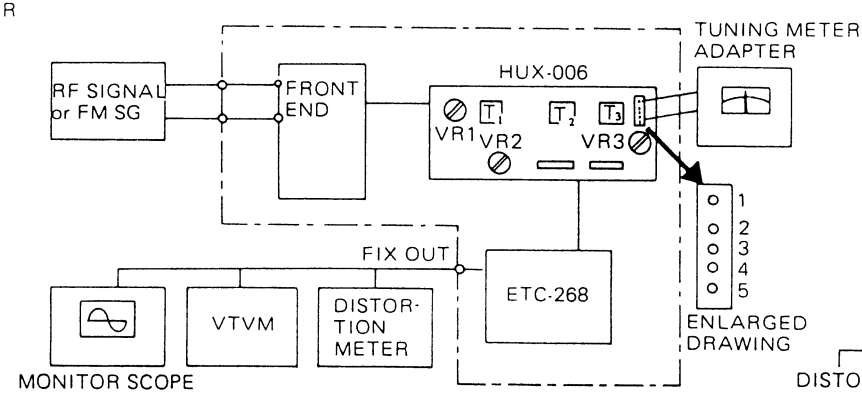
STEP	ITEM	DIAL SETTING	INPUT SIDE					OUTPUT SIDE		ADJUST	ADJUST LIMIT	REMARKS
			INSTRUMENT	FREQ.	INPUT LEVEL	MODULATION	COUPLING	INSTRUMENT	CONNECTION			
RF AMPLIFIER SECTION												
1	DIAL CALIBLATION	98 MHz	FM SG	98 MHz	40 dBμ	–	ANT. 300 ohm terminal	Monitor scope or TUNING meter	OUTPUT	Lo, TCo	Frequency 88 MHz 98 MHz 108 MHz	Check to ensure that the discrepancy is with in the rated value when adjusting to 88 and 108 MHz respectively. If it does not conform, readjust with Lo, TCo of Frontend.
		88 MHz	Same	88 MHz	Same	–	Same	Same	Same			
		108 MHz	Same	108 MHz	Same	–	Same	Same	Same			
2	IFT	98 MHz	FM SG	98 MHz	19 dBμ	1 kHz or 400 Hz 100% MOD.	Same	SIGNAL meter	METER-OUT (HUX-006)	IFT (FRONT END)	maximum output	Set IF BAND SW to WIDE
3	QUADRATURE COIL (I)	–	No signal	–	–	–	–	TUNING meter	–	bottom cover of T_2	Center point of TUNING meter	
	(II)	98 MHz	FM SG	98 MHz	60 dBμ	1 kHz or 400 Hz 100% MOD	Same	Distortion meter	TP-1 (HUX-006) to ground	top cover of T_2	minimum destortion	about 0.4%
4	SIGNAL METER LEVEL	98 MHz	FM SG	98 MHz	60 dBμ	1 kHz 45% MOD. PILOT 10%	Same	SIGNAL meter (right side)	–		between –2.5 dB and +3 dB	Set METER SELECTOR to SIGNAL. Adjust position WIDE, then adjust position NARROW to same level of SIGNAL meter. [VR_1 (HUX-006)]
5	MUTING TRIGGER LEVEL	98 MHz	FM SG	98 MHz	19 dBμ	Same	Same	LEVEL meter VTVM or Monitor scope		VR_2 (HUX-006)	adjust for muting trigger level	Set MUTING SW to ON
6	RATIO TRANSFORMER (I)		no signal	–	–	–	–	TUNING meter adapter		top cover of T_3	center point of TUNING meter adapter	In case of (II), remove TUNING meter adapter.
	(II)	98 MHz	FM SG	98 MHz	60 dBμ	1 kHz 100% MOD.	ANT. 300 ohm terminal	Distortion meter	output terminal	bottom cover of T_3	minimum distortion	Check discrepancies in (I) by mean of (II)
7	OUTPUT LEVEL (Rch)		FM SG	98 MHz	60 dBμ	400 Hz 100% MOD.	Same	Volt meter	FIX OUT (Rch) terminal	VR (OUTPUT LEVEL ADJ) (HUX-006)	adjust volt meter 1.6V (for Germany) or 1.15V (for others)	
MPX SECTION and AUDIO SECTION												
1	76 kHz (I)	–	–	–	–	–	–	Frequency counter	TP_1 TP_3 (Ground) (ETC-268)	VR_8 VR_1 (ETC-268)	76 kHz ± 20 Hz	Input impeance of Freq. counter is more than 500 kohm.
	(II)	–	–	–	–	–	–	Same	Same	VR_9 (ETC-268)	76 kHz ± 20 Hz	In case of (I), connect No. 9 pin to No. 8 pin. In case of (II), connect TP_2 to TP_3 (ground).

2	STEREO SEPARATION	98 MHz	FM SG	98 MHz	60 dBμ	1 kHz 45% MOD. pilot 10%	Same	Stereo separation meter	OUTPUT terminal	VR_{11} or VR_{12}	Separation WIDE: 55 dB NARROW: 48dB	
3	STEREO DISTORTION	98 MHz	FM SG	98 MHz	60 dBμ	1 kHz 45% MOD. pilot 10%	Same	Distortion meter	OUTPUT terminal	WIDE: IFT (Frontend) NARROW: T_1	minimum distortion WIDE: 0.05~0.07% NARROW: 0.1~0.4%	Adjustable range of cores (both Frontend and T_1 are with in 1 turn)
4	SUBCARRIER CANCELLING	98 MHz	FM SG	98 MHz	60 dBμ	MOD. pilot only 10%	Same	Oscilloscope connect to OUTPUT, through the amplifier (gain: 60 dB)	VR2 (ETC-268)	minimum level		
LEVEL METER SECTION												
1	LEVEL METER	–	AUDIO oscillator	1 kHz	2.45V	–	FROM AMP.	LEVEL meter	–	VR5, VR6 (METER ADJ) (ETC-268)	adjust VR5 and VR6 to LEVEL meter at 0 dB (both channels)	
2	TUNER OUTPUT LEVEL	98 MHz	FM SG	98 MHz	60 dBμ	400 Hz 100% MOD	ANT. 300 ohm terminal	LEVEL meter	–	VR_3, VR_4	LEVEL meter 0 dB (both channels)	Set METER SELECTOR to LEVEL
RECORDING CHECK SIGNAL SECTION												
Adjustment of tuner output level indication to be completed								LEVEL meter		VR_7 (ETC-268)	LEVEL meter: –6 dB	Set FUNCTION SW to REC LEVEL

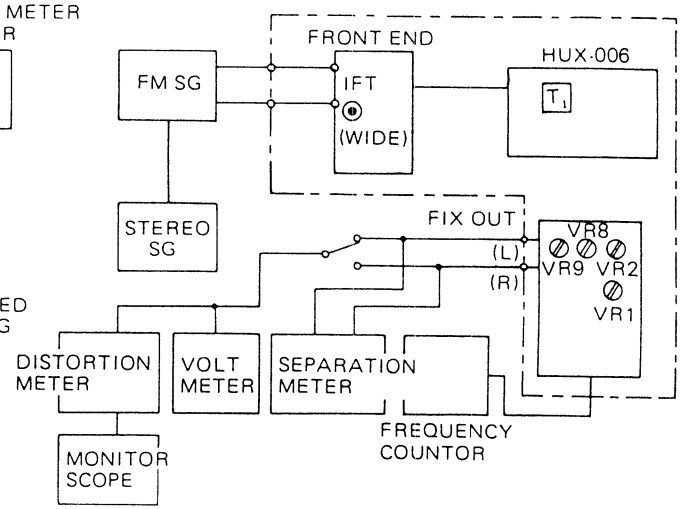
CIRCUIT OF TUNING METER ADAPTER



ADJUSTMENT BY RF SIGNAL GENERATOR

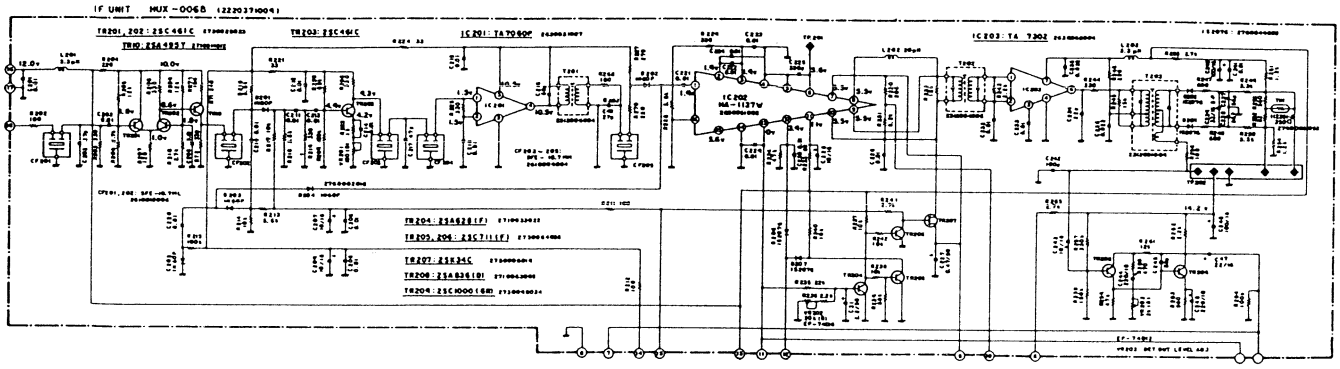


ADJUSTMENT FOR STEREO DEMODULATION



PRINTED CIRCUIT BOARD PATTERNS, CIRCUIT DIAGRAMS AND PARTS LIST

FM IF UNIT HUX-006B



TR1: 2SC461

E	C	B
1.0v	10.0v	1.8v

TR2: 2SC461

E	C	B
1.0v	8.6v	1.8v

TR3: 2SC461

E	C	B
4.2v	9.3v	4.9v

IC1 TA7060P

1	2	4	5
1.5v	1.5v	10.5v	10.5v

IC2: HA-1137W

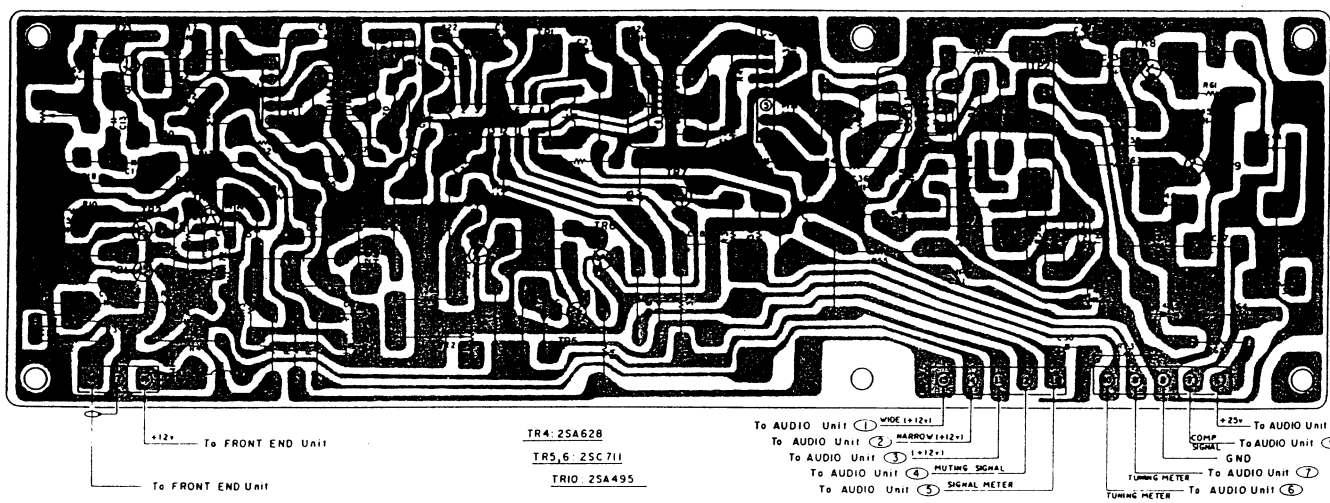
1	2	3	6	7	8	9	10	11	12	13	15
1.9v	1.9v	1.9v	5.6v	5.5v	5.5v	5.5v	5.5v	11v	3.9v	0v	5.6v

IC3 TA7302

TR7 2SK34

TR9 2SC1000

TR8 2SA836

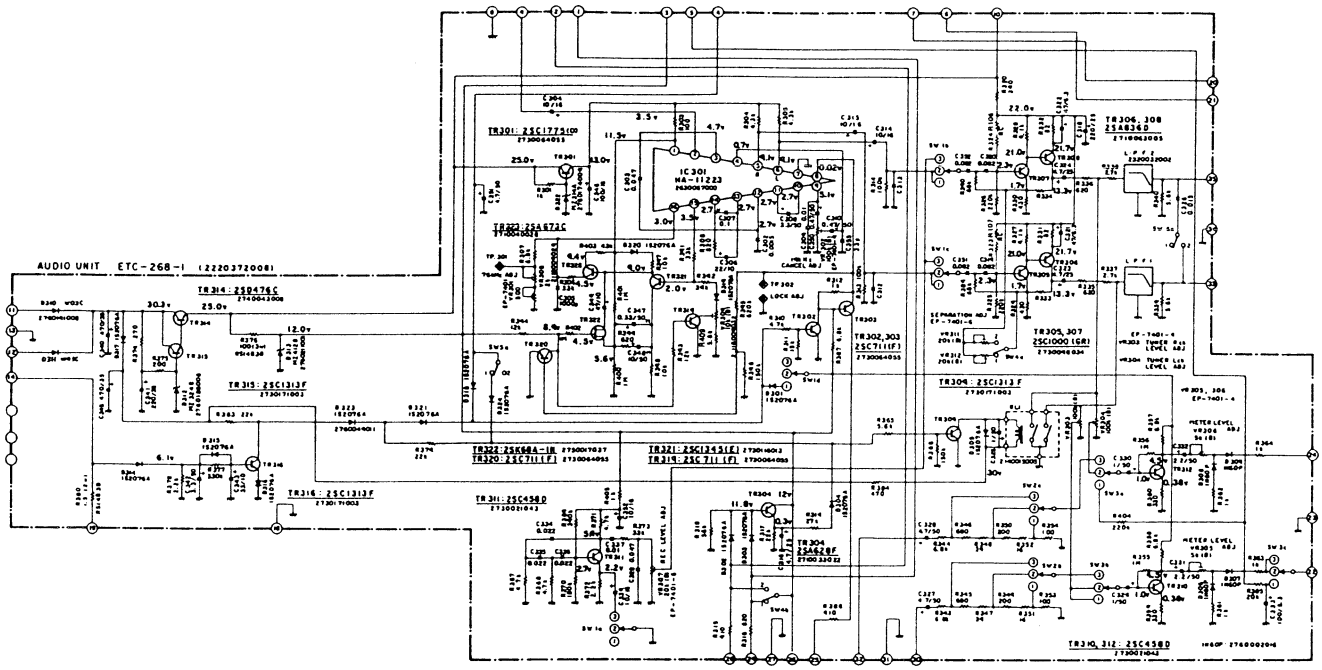

+12v
To FRONT END Unit
To FRONT END Unit
TR4: 2SA628
TR5,6: 2SC711
TRIO: 2SA495
To AUDIO Unit (1) WIDE (+12v)
To AUDIO Unit (2) NARROW (+12v)
To AUDIO Unit (3) (+12v)
To AUDIO Unit (4) MUTING SIGNAL
To AUDIO Unit (5) SIGNAL METER
+23v To AUDIO Unit (10)
COMP SIGNAL To AUDIO Unit (9)
GND
TUNING METER To AUDIO Unit (7)
TUNING METER To AUDIO Unit (6)

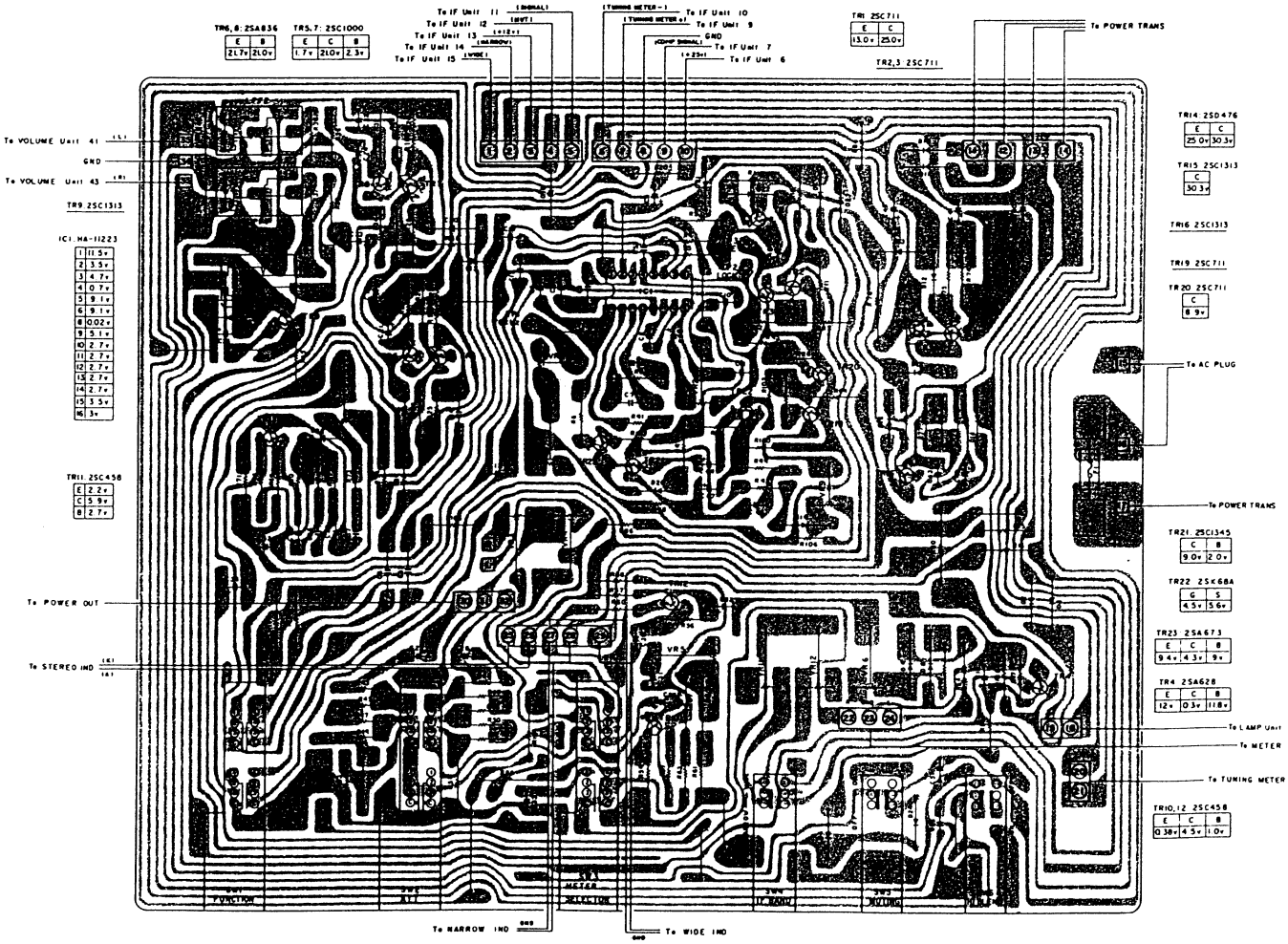
HUX-006B PARTS LIST

Ref. No.	Part No.	Description	
	SEMICONDUCTORS		
IC1	2630031007	TA-7060P	IC
IC2	2630051003	HA-1137W	IC
IC3	2630068009	TA-7302	IC
TR1,2,3	2730025073	2SC 461 (C)	Transistor
TR4	2710033022	2SA 628 (F)	Transistor
TR5,6	2730064055	2SC 711 (F)	Transistor
TR7	2750006019	2SK 34 (C)	Transistor
TR8	2710063005	2SA 836 (D)	Transistor
TR9	2730098034	2SC 1000 (GR)	Transistor

Ref. No.	Part No.	Description			
TR10	2710014012	2SA 495 (Y)		Transistor	
D1,2,3,4,5	2760002016	1N60 P		Diode	
D6,7,8,9	2760049008	1S2076		Diode	
TH1	2790006053	112351-2		Thermistor	
	CAPACITORS				
C1,2,3,4,5,6,8,10,11,12,13,14,15,18, 20,21,22,23,24,26.29,30,32,33,41	2531024003	0.01μF	$^{+80}_{-20}$%	50V	Ceramic Capacitor
C2,49	2533613001	27pF	±5%	50V	Ceramic Capacitor
C7,9,28,43	2544015009	10μF		16V	Electrolytic Capacitor
C16,45	2533623004	68pF	±5%	50V	Ceramic Capacitor
C17	2533619005	47pF	±5%	50V	Ceramic Capacitor
C25	2533639001	330pF	±5%	50V	Ceramic Capacitor
C27,50	2544043000	0.47μF		50V	Electrolytic Capacitor
C31	2544066003	2.2μF		50V	Electrolytic Capacitor
C34	2533611003	22pF	±5%	50V	Ceramic Capacitor
C35,36	2531025002	0.022μF	$^{+80}_{-20}$%	50V	Ceramic Capacitor
C37,38	2533621006	56pF	±5%	50V	Ceramic Capacitor
C39	2543013028	33μF BP		10V	Electrolytic Capacitor
C40,48	2544018006	100μF		16V	Electrolytic Capacitor
C42	2533627000	100pF		50V	Ceramic Capacitor
C44,46	2544004007	220μF		6.3V	Electrolytic Capacitor
C47	2544054002	22μF		16V	Electrolytic Capacitor
	RESISTORS				
R2,68	2410296004	180 ohm	±5%	1/4W	Carbon Film Resistor
R3,8,19,25,29,44,66,72	2410302008	330 ohm	±5%	1/4W	Carbon Film Resistor
R4,46,70	2410298002	220 ohm	±5%	1/4W	Carbon Film Resistor
R5,9,61	2410340002	12 kohm	±5%	1/4W	Carbon Film Resistor
R6,10,41,55	2410324002	2.7 kohm	±5%	1/4W	Carbon Film Resistor
R7	2410292008	120 ohm	±5%	1/4W	Carbon Film Resistor
R11,12,56	2410290000	100 ohm	±5%	1/4W	Carbon Film Resistor
R13,16,18,28	2410332007	5.6 kohm	±5%	1/4W	Carbon Film Resistor
R14,17,37,38,40,42	2410338001	10 kohm	±5%	1/4W	Carbon Film Resistor
R15,64,69,73	2410362006	100 kohm	±5%	1/4W	Carbon Film Resistor
R20,39	2410358007	68 kohm	±5%	1/4W	Carbon Film Resistor
R21,24	2410278006	33 ohm	±5%	1/4W	Carbon Film Resistor
R23	2410314009	1 kohm	±5%	1/4W	Carbon Film Resistor
R27	2410300000	270 ohm	±5%	1/4W	Carbon Film Resistor
R30	2410297003	200 ohm	±5%	1/4W	Carbon Film Resistor
R31	2410336003	8.2 kohm	±5%	1/4W	Carbon Film Resistor
R32	2410344008	18 kohm	±5%	1/4W	Carbon Film Resistor
R33	2410286001	68 ohm	±5%	1/4W	Carbon Film Resistor
R34,59	2410354001	47 kohm	±5%	1/4W	Carbon Film Resistor
R35	2410346006	22 kohm	±5%	1/4W	Carbon Film Resistor
R36,43,62	2410322004	2.2 kohm	±5%	1/4W	Carbon Film Resistor
R45	2410342000	15 kohm	±5%	1/4W	Carbon Film Resistor
R47,48	2410310003	680 ohm	±5%	1/4W	Carbon Film Resistor
R49,50	2410326000	3.3 kohm	±5%	1/4W	Carbon Film Resistor
R51,54	2410316007	1.2 kohm	±5%	1/4W	Carbon Film Resistor
R52	2410288009	82 ohm	±5%	1/4W	Carbon Film Resistor
R53,63	2410308002	560 ohm	±5%	1/4W	Carbon Film Resistor
R57	2410374007	330 kohm	±5%	1/4W	Carbon Film Resistor
R58	2410366002	150 kohm	±5%	1/4W	Carbon Film Resistor
R60	2410306004	470 kohm	±5%	1/4W	Carbon Film Resistor
R67,71	2410294006	150 ohm	±5%	1/4W	Carbon Film Resistor
	OTHER PARTS				
L1,3	TRT09956	Inductor		3.3μH	
L2	2312005034	Inductor		20μH	
T1	2312006004	FM IFT			
T2	2312004006	IF DET Transformer			
T3	2312001009	Ratio Transformer Assembly			
CF1,2,3,4,5	2610007006	FM Ceramic Filter			
VR1	EP-5462H1	Potentiometer		100 ohm (B)	
VR2	EP-74016	Potentiometer		20 kohm (B)	
VR3	EP-74012	Potentiometer		2 kohm (B)	

AUDIO UNIT ETC-268B, C, D





ETC-268B, C, D PARTS LIST

Marked (•) indicates parts difference by model of countries.

Ref. No.	Part No.	Description			
SEMICONDUCTORS					
IC1	2630067000	HA 11223		IC	
TR1	2730158000	2SC 1775D		Transistor	
TR2,3,19,20	2730064055	2SC 711 (F)		Transistor	
TR4	2710033022	2SA 628 (F)		Transistor	
TR5,7	2730098034	2SC 1000 (GR)		Transistor	
TR6,8	2710063005	2SA 836 (D)		Transistor	
TR9,15,16	2730171003	2SC 1313 (F)		Transistor	
TR10,11,12	2730021043	2SC 458 (D)		Transistor	
TR14	2740043008	2SD 476 (C)		Transistor	
TR21	2730116013	2SC 1345 (E)		Transistor	
TR22	2750017137	2SK 68A- IN		Transistor	
TR23	2710040028	2SA 673 (C)		Transistor	
D1,2,3,4,5,14,15,16,17,18,19,20, 21,23,24	2760049008	1S 2076		Diode	
D6,7,8,9	2760002016	1N 60P		Diode	
D10,11	2760191008	W 03C		Diode	
D12	2760188008	MZ 324 B		Diode	
D13	2760211001	MZ 412 B		Diode	
D22	2760174009	MZ 314 A		Diode	
LED	3939012001	Stereo, Narrow		LED	
LED	3939016007	Wide		LED	
CAPACITORS					
C2	2551062003	150pF	±10%	50V	Plastic Film Capacitor
C3	2551121054	0.018μF	±5%	50V	Plastic Film Capacitor
C4,14,15,39,54	2544015009	10μF		16V	Electrolytic Capacitor
C5	2556099000	1000pF	±5%	50V	Plastic Film Capacitor
C6	2544069000	22μF		10V	Electrolytic Capacitor
C7	2551088003	0.24μF	±10%	50V	Plastic Film Capacitor
C8,42	2544045008	3.3μF		50V	Electrolytic Capacitor
C9,37	2551072006	0.01μF	±10%	50V	Plastic Film Capacitor
C10,50	2544043000	0.47μF		50V	Electrolytic Capacitor
• C12,13 (For U.S.A.) = ETC-268D	2551121054	0.018μF	±5%	50V	Plastic Film Capacitor
• C12,13 (For Europe) = ETC-268B	2551121038	0.012μF	±10%	50V	Plastic Film Capacitor
C16,23,24,53	2544024003	4.7μF		25V	Electrolytic Capacitor
C18	2544029008	22μF		25V	Electrolytic Capacitor
C19,20,51,52	2551122037	0.082μF	±5%	50V	Plastic Film Capacitor
C21,22	2544002009	47μF		6.3V	Electrolytic Capacitor
C25,29,30	2544044009	1μF		50V	Electrolytic Capacitor
C26	2551074004	0.015μF	±10%	50V	Plastic Film Capacitor
C27,28	2544046007	4.7μF		50V	Electrolytic Capacitor
C31,32	2544066003	2.2μF		50V	Electrolytic Capacitor
C33	2544003008	10μF		6.3V	Electrolytic Capacitor
C34,35,36	2551076002	0.022μF	±10%	50V	Plastic Film Capacitor
C40,45	2544041002	47μF		35V	Electrolytic Capacitor
C41	2544039001	22μF		35V	Electrolytic Capacitor
C43	2544008003	33μF		10V	Electrolytic Capacitor
C46	2544018006	100μF		16V	Electrolytic Capacitor
C47	2549014021	0.33μF	±20%	50V	Electrolytic Capacitor
C48	2549009049	10μF	±20%	50V	Electrolytic Capacitor
C49	2544009002	47μF		10V	Electrolytic Capacitor
C50	2533615009	33μF		50V	Electrolytic Capacitor
RESISTORS					
R1,12,61,62,63,64,105	2410314009	1 kohm	±5%	1/4W	Carbon Film Resistor
R3,53,54	2410290000	100 ohm	±5%	1/4W	Carbon Film Resistor
R4,5	2410329007	4.3 kohm	±5%	1/4W	Carbon Film Resistor
R6,73,91,92	2410350005	33 kohm	±5%	1/4W	Carbon Film Resistor
R7,43,44,57,58,87	2410334005	6.8 kohm	±5%	1/4W	Carbon Film Resistor
R8	2410312001	820 ohm	±5%	1/4W	Carbon Film Resistor
R10,67,68,71	2410330009	4.7 kohm	±5%	1/4W	Carbon Film Resistor
R11	2410342000	15 kohm	±5%	1/4W	Carbon Film Resistor
R13,14	2410362006	100 kohm	±5%	1/4W	Carbon Film Resistor
R15	2410313000	910 ohm	±5%	1/4W	Carbon Film Resistor
R16,35,36,99	2410309001	620 ohm	±5%	1/4W	Carbon Film Resistor
R17	2410356009	56 kohm	±5%	1/4W	Carbon Film Resistor
R18,79,83	2410346006	22 kohm	±5%	1/4W	Carbon Film Resistor
R19	2410348004	27 kohm	±5%	1/4W	Carbon Film Resistor
R20	2410304006	390 ohm	±5%	1/4W	Carbon Film Resistor
R23,24	2410756007	1.8 Mohm	±5%	1/2W	Carbon Film Resistor

ETC-268B (Con.)

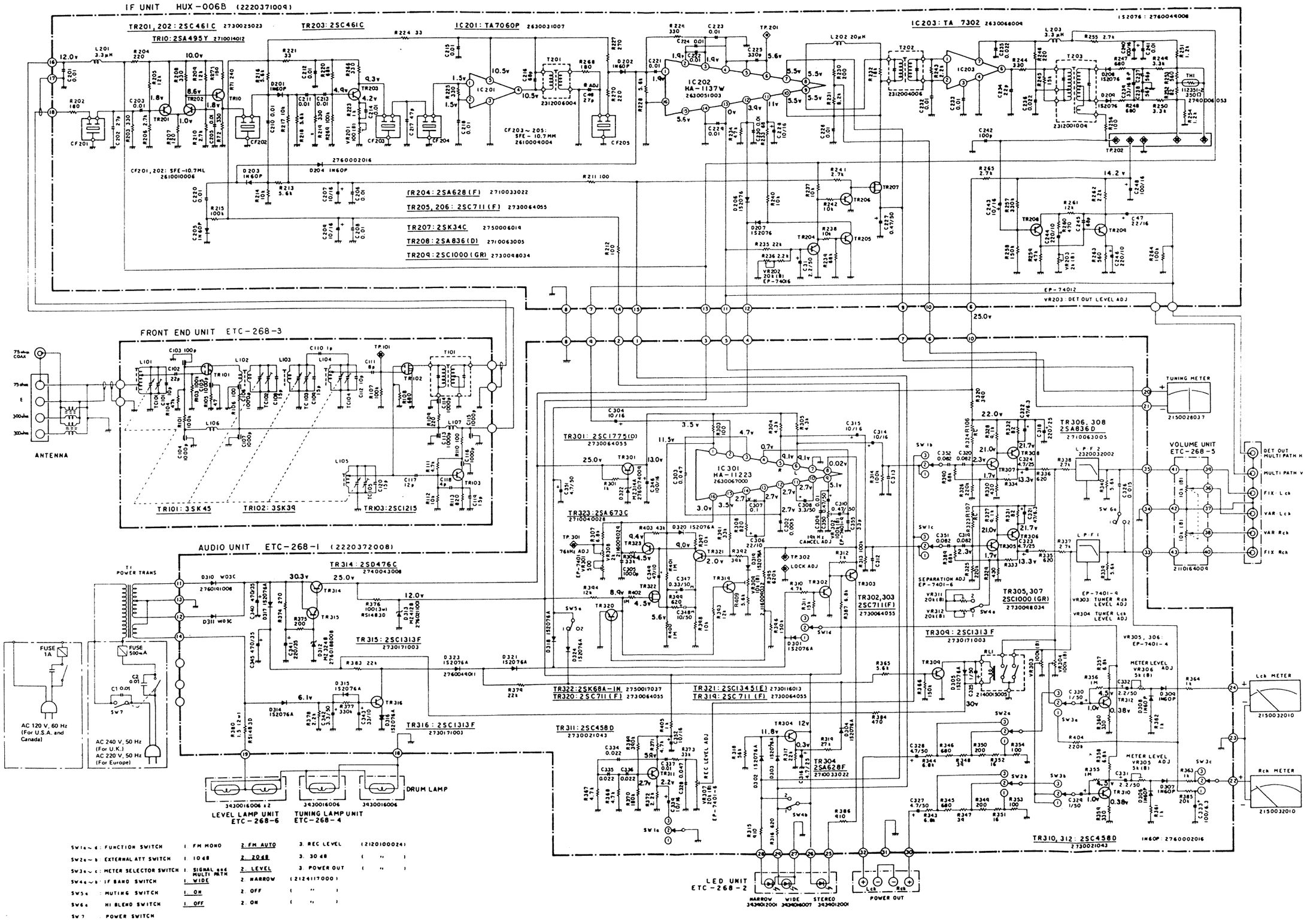
Ref. No.	Part No.	Description			
R25,26,104	2410370001	220 kohm	±5%	1/4W	Carbon Film Resistor
R27,28	2410337002	9.1 kohm	±5%	1/4W	Carbon Film Resistor
R29,30	2410305005	430 ohm	±5%	1/4W	Carbon Film Resistor
R31,32	2410288009	82 ohm	±5%	1/4W	Carbon Film Resistor
• R33,34 (For Europe) = ETC-268B	2410325001	3 kohm	±5%	1/4W	Carbon Film Resistor
• R33,34 (Only Germany) = ETC-268C	2410329007	4.3 kohm	±5%	1/4W	Carbon Film Resistor
R37,38	2410324002	2.7 kohm	±5%	1/4W	Carbon Film Resistor
R39,40,65	2410332007	5.6 kohm	±5%	1/4W	Carbon Film Resistor
R41,55,56,100,101,102	2410765001	1 Mohm	±5%	1/4W	Carbon Film Resistor
R45,46	2410310003	680 ohm	±5%	1/4W	Carbon Film Resistor
R47,48	2410280007	39 ohm	±5%	1/4W	Carbon Film Resistor
R49,50,75	2410297003	20 ohm	±5%	1/4W	Carbon Film Resistor
R51,52	2410271003	16 ohm	±5%	1/4W	Carbon Film Resistor
R59,60	2410302008	330 ohm	±5%	1/4W	Carbon Film Resistor
R66,96	2410366002	150 kohm	±5%	1/4W	Carbon Film Resistor
R69	2410376005	390 kohm	±5%	1/4W	Carbon Film Resistor
R70	2410368000	180 kohm	±5%	1/4W	Carbon Film Resistor
R72,78	2410322004	2.2 kohm	±5%	1/4W	Carbon Film Resistor
R74	2410300000	270 ohm	±5%	1/4W	Carbon Film Resistor
R76	2440141006	100 ohm	±5%	3W	Metal Oxide Film Resistor
R77	2410374007	330 kohm	±5%	1/4W	Carbon Film Resistor
R80	2440064002	1.5 ohm	±5%	2W	Metal Oxide Film Resistor
R84	2410306004	470 ohm	±5%	1/4W	Carbon Film Resistor
R85	2410345007	20 kohm	±5%	1/4W	Carbon Film Resistor
R89,90	2410358007	68 kohm	±5%	1/4W	Carbon Film Resistor
R93,94	2410340002	12 kohm	±5%	1/4W	Carbon Film Resistor
R95	2410760006	620 kohm	±5%	1/4W	Carbon Film Resistor
R97,98	2410338001	10 kohm	±5%	1/4W	Carbon Film Resistor
R103	2410353002	43 kohm	±5%	1/4W	Carbon Film Resistor
• R109 (For Europe) = ETC-268B	2410332007	5.6 kohm	±5%	1/4W	Carbon Film Resistor
• R106,107 (Only Germany) = ETC-268C	2410378003	470 kohm	±5%	1/4W	Carbon Film Resistor
OTHER PARTS					
SW1,2,3	2120100024	Function		Rotary Switch	
		Meter Selector		Rotary Switch	
		External ATT.		Rotary Switch	
SW4,5,6	2124117000	IF Band		Lever Switch	
		Muting		Lever Switch	
		Hi Blend		Lever Switch	
LPF1,2	2320032002	Low Pass Filter			
RL1	2140015005	Reed Relay			
VR1	EP-7401	500 ohm		Potentiometer	
VR2,3,4	EP-7401-9	100 kohm		Potentiometer	
VR5,6	EP-7401-4	5 kohm		Potentiometer	
VR7,11,12	EP-7401-6	20 kohm		Potentiometer	
VR8	2116009029	2 kohm		Potentiometer	
VR9	2116009032	10 kohm		Potentiometer	
OUTPUT LEVEL	2110164009	10 kohm x 2		Potentiometer	

CHASSIS AND CABINET GROUP PARTS LIST

Marked (•) indicates parts difference by model of countries.

Part No.	Description
• 1050222002	Back Panel (For U.S.A.)
• 1050209009	Back Panel (For U.K. and Europe)
• 2062001003	AC Cord with Plug (For U.S.A.)
• 2062020000	AC Cord (For U.K.)
• 2062002002	AC Cord with Plug (For Europe)
• MD-3802	Bushing (For U.S.A.)
• MD-2982H	Cord Bush (For U.K.)
• 4450020005	Cord Bush (For Europe)
2050089008	7P Wiring Terminal
4150088004	Insulating Sheet
2032055005	Coaxial Connector
• 2020015002	Fuse Holder (For U.S.A.)
• 2020012005	Fuse Holder (For U.K. and Europe)
• 2061023008	Fuse 1A (For U.S.A.)
• 2061015003	Fuse 0.5A Time Lag (For U.K. and Europe)
2050049006	4P Terminal
2310017008	Balun Transformer
4110155100	Front Chassis
• 2124132001	Power Switch (For U.S.A.)
• 2124124006	Power Switch (For U.K. and Europe)
1430089108	Dial Mask
4520014307	Dial Pointer
2150028037	Tuning Meter
1410111009	Tuning Meter Plate
4510022105	Dial Reflector (B)
1430033222	Filter
2150032010	Level Meter
1410110000	Level Meter Plate
4610066197	Rubber Sheet
4510023104	Dial Reflector (A)
1430033219	Filter
4110157302	Dial Chassis
MD-0131J	Guide Wheel
4430166002	Dial Shaft
2160009004	FM Front End Assembly
4220136006	Driving Shaft
4250064106	Bearing
4210072112	Fly Wheel
4210024209	Drum Wheel
4210023200	Dial Wheel
S-2680	Tension Spring
4230012000	Dial String
4410267206	Guide Wheel Bracket
MD-0131J	Guide Wheel
4110148502	Side Chassis
4110158204	Frame
EP-4772	Code Holder
• 2335110100	Power Transformer (For U.S.A.)
• 2335136003	Power Transformer (For U.K.)
• 2335110100	Power Transformer (For Europe)
3930016006	Drum Lamp
4510006215	Drum Lamp Bracket
1430033206	Lamp Filter
1190005040	Blind Sheet
1120166108	Lever Knob
1440357105	Front Panel
1430091109	Window
EP-4773H	Cord Holder
2038052060	5P Connector Cord
1120179108	Tuning Knob
1120162209	Function Knob, Meter Selector Knob, External Attenuator Knob
1120163208	Output Level Knob
1020063314	Top Cover

WIRING DIAGRAM



DENON

PARTS LIST FOR EXPLODED VIEW

Ref. No.	Part No.	Part Name	Ref. No.	Part No.	Part Name
1	4770064107	FIXING SCREW	45	2120100024	ROTARY SWITCH
2	4730354035	3 x 8 CBRTS	46	ETC-268B-5	AUDIO UNIT-5
3	2150032010	LEVEL METER ASS.	47	4610144038	CUSHION
4	4610066197	RUBBER SHEET	48	2048014108	6P. WRAPPING PIN JACK
5	4610074163	BLIND			
6	1440357105	FRONT PANEL	49	—	7 NSP
7	1120166108	LEVER KNOB	50	1050188418	BOTTOM COVER
8	1120162209	KNOB	51	2050061110	4P. TERMINAL
9	1120179108	TUNING KNOB	52	4730456014	4 x 12 CBRTS (2)
10	1120163208	LEVEL ADJ. KNOB	53	1040040003	FOOT
11	4450020005	CORD BUSH (For Europe)	54	1050209009	BACK PANEL (For Europe)
11	MD-3802	BUSHING (For U.S.A. and Canada)	54	1050222002	BACK PANEL (For U.S.A. and Canada)
11	MD-2982H	CORD BUSH (For England)	55	4700009006	3 x 5 CPS (SW)
12	2038004005	5P. CONNECTOR BASE	56	1430033206	FILTER
13	4110148502	SIDE CHASSIS	57	1020063314	TOP COVER
14	4610061121	RUBBER SHEET	58	SC-1162	SPECIAL SCREW
15	4110155100	FRONT CHASSIS	59	1220007057	SPACER
16	4711304017	3 x 8 CPS	60	3939012001	LED (SEL-103)
17	1190005040	BLIND SHEET	61	3939016007	LED (SEL-303)
18	—	8NSP	62	4520033003	DRUM
19	4711304033	3 x 8 CPS	63	2335101009	POWER TRANS-FORMER (For Europe)
20	2062002002	AC CORD WITH PLUG (For Europe)	63	2335110100	POWER TRANS-FORMER (For U.S.A. and Canada)
20	2062001003	AC CORD WITH PLUG (For U.S.A. and Canada)	63	2335136003	POWER TRANS-FORMER (For England)
20	2062020000	AC CORD (For England)	64	—	8 TWA
21	ETC-268B-6	AUDIO UNIT-6	65	4610061118	RUBBER SHEET
22	3930016006	LAMP	66	4110158204	FRAME
23	4510023104	REFLECTOR (A)	67	4410267206	GUIDE WHEEL BRACKET
24	1430033219	FILTER			
25	1430093000	DIAL MASK ASS.	68	EP-4772	CORD HOLDER
26	4711304059	3 x 8 CPS	69	MD-0131J	GUIDE WHEEL
27	EP-4773H	CORD HOLDER	70	2160009004	FM FRONT END ASS.
28	ETC-268B-4	AUDIO UNIT	71	SC-1161	TAPPING SCREW
29	4610092006	SPACER	72	4210023200	DIAL WHEEL
30	HUX-006B	IF UNIT	73	4110157302	DIAL CHASSIS
31	2150028037	TUNING METER ASS.	74	S-2680	TENSION SPRING
32	1430033222	FILTER	75	4210072112	FLY WHEEL
33	4610044041	CUSHION	76	4730353036	3 x 6 CBRTS (2)
34	4510022105	REFLECTOR (B)	77	4761005007	E-RING
35	4730304014	3 x 8 CBRTS (1)	78	4210024209	DRUM WHEEL
36	ETC-268B-4	AUDIO UNIT-4	79	4430166002	DIAL SHAFT
37	2220127004	LAMP CRICUIT BOARD	80	4756010007	5N
38	4510006215	LAMP BRACKET	81	4756802008	9NSP
39	2038052060	5P. CONNECTOR CORD	82	4753800003	9TWA
40	2124124006	POWER SWITCH (For Europe)	83	2110164004	POTENTIOMETER
40	2124132001	POWER SWITCH (For U.S.A. and Canada)			
41	2558000055	PLASTIC FILM CAPACITOR			
42	ETC-268B-3	AUDIO UNIT-3			
43	2124117000	LEVER SWITCH			
44	ETC-268B-1	AUDIO UNIT-1			

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NIPPON COLUMBIA CO., LTD.
No. 14-14, 4-CHOME AKASAKA,
MINATO-KU, TOKYO 107 JAPAN
TEL: 03-584-8111
TLX: JAPANOLA J22591
CABLE: NIPPONCOLUMBIA TOKYO

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